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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,222	03/02/2004	Yuji Nakagawa	108075-00124	9846
4372	7590	06/10/2004	EXAMINER PHAM, LY D	
ARENT FOX KINTNER PLOTKIN & KAHN 1050 CONNECTICUT AVENUE, N.W. SUITE 400 WASHINGTON, DC 20036			ART UNIT 2818	PAPER NUMBER

DATE MAILED: 06/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/790,222	NAKAGAWA, YUJI
Examiner	Art Unit	
Ly D Pham	2818	

-- The MAILING DATE of this communication appars on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 02 March 2004.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 9-13 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 10 is/are allowed.

6)  Claim(s) 9 and 11-13 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 02 March 2004 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All   b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. 09/994,611.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. \_\_\_\_ .  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 0304.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: See Continuation Sheet.

Continuation of Attachment(s) 6). Other: Statement of Reason for Allowance.

## **DETAILED ACTION**

1. Applicant's Pre-Amendment filed March 02, 2004 has been entered. Claims 1 – 8 have been canceled. Claims 9 – 13 are presented for the examination.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claim 9** claims a method for conducting a multiple word line selection test on a semiconductor memory device. The method comprises a first step of inactivating multiple word lines in the first memory cell block ..., and a second step for inactivating multiple word lines in the second memory cell block ....

It is considered unclear for one skilled in the art to recognize how the steps of inactivating the multiple word lines ... correlate to conducting the multiple word lines selection test since “inactivating” basically means doing nothing to the word lines. Hence, the claimed steps show no contribution/relationship, which make sense, to the method for conducting the word line selection test.

Clarification is required to overcome this type of rejection.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 11 – 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's admitted prior art.

Regarding **claim 11**, AAPA discloses a semiconductor memory device comprising: a plurality of memory cell blocks (fig. 1, blocks BL0-3), wherein each memory cell block includes a plurality of memory cells and a plurality of word lines connected to the memory cells (fig. 2); a plurality of sense amp groups ... (fig. 1, sense amp groups 1's); a plurality of block control circuit ... (fig. 1, block control circuits 4's); a plurality of sense amp drive circuits ... (fig. 1, sense amp drive circuits 3's), each of the sense amp drive circuits include a latch circuit (fig. 3, 12a/12b).

Regarding **claim 12**, AAPA also discloses the device according to claim 11, further comprising: a timing signal generation circuit (specification page 3, lines 21 – 22) ...; wherein the latch circuit receives the sense amp set timing signal and the sense amp reset timing signal (specification page 3, line 16 – page 3, line 28).

Regarding **claim 13**, AAPA further discloses the device according to claim 11, wherein the block control circuit includes a word line reset signal generation circuit for generating a word line reset signal that stops selecting the plurality of word lines (specification page 3, lines 14 –

25), wherein the latch circuit receives the word lines reset signal including block information (specification page 5, line 28 – page 6, line 28).

***Allowable Subject Matter***

6. **Claim 10** is allowed.

7. The following is an examiner's statement of reasons for allowance:

The prior arts teach a method for conducting a multiple word line selection test on a semiconductor memory device provided with a plurality of memory cell blocks, which include a first memory cell block and a second memory cell block, each of the memory cell blocks having a plurality of memory cells and a plurality of word lines connected to the memory cells, and a plurality of sense amp groups connected to the first and second memory cell blocks, each of the sense amp groups amplifying cell information read from the plurality of memory cells of an associated one of the memory cell blocks, the method comprising:

a first step for activating one or the plurality of word lines ...;

a second step for activating word lines other than the one that has been activated in the first memory cell block;

a third step for activating one of the plurality of word lines in the second memory cell block ...;

a fourth step for activating word lines other than the one that has been activated in the second memory cell block.

However, the prior arts did not further disclose:

a fifth step for inactivating multiple word lines in the second memory block and the sense amp group associated with the second memory block and the sense amp groups ...; and

a sixth step for inactivating multiple word lines in the second memory block and the sense amp groups ...,

wherein the third and fourth steps are performed while the first and second steps are continuously performed or the second and fourth steps are performed while the first and third steps are continuously performed.

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. When responding to the office action, Applicant(s) are advised to provide the examiner with the page and line numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

11. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02(b)).

12. Any inquiry concerning this communication on earlier communications from the examiner should be directed to Ly Pham, whose telephone number is **571-272-1793**. The examiner can normally be reached on Monday – Friday from 8:30am to 5:00pm, alternate Friday off. The examiner's supervisor, David Nelms, can be reached at **571-272-1787**. The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Ly Pham



June 7, 2004



David Nelms  
Supervisory Patent Examiner  
Technology Center 2800